Serial No.: 10/655,227 Inventor(s): Morin et al. U.S. PTO Customer No. 25280

Case No.: 5514A

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of:

Morin et al.

Serial Number:

10/655,227

Filed:

September 4, 2003

For:

LOW-SHRINK POLYPROPYLENE TAPE FIBERS COMPRISING

HIGH AMOUNTS OF NUCLEATING AGENTS

**Group Art Unit:** 

1774

Examiner:

Edwards, Newton

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450 Certificate of Mailing Under 37 CFR § 1.8

I hereby certify that this correspondence, and all correspondence referenced herein as being enclosed with this correspondence, is being deposited with the United States Postal Service in an envelope addressed to "Commissioner for Patents, Washington, D.C. 20231" with sufficient postage on the following

Signature:

Sir:

## INFORMATION DISCLOSURE STATEMENT

In compliance with Applicant's duty under 37 CFR §1.56, Applicant hereby submits this Information Disclosure Statement filed according to the provisions of 37 CFR §1.97 and §1.98.

Enclosed herewith is Form PTO-1449 (Modified) which lists various references submitted by Applicant for consideration. Also, enclosed herewith are copies of each of the references listed in the Form PTO-1449 (Modified). The Examiner is requested to review each of the references, indicate that the references were reviewed by initialing the Form PTO-1449 (Modified) for each reference, and returning a copy of the initialed Form PTO-1449 (Modified) to the Applicant.

This information disclosure statement is being submitted after three months of the filing date of the application and after the first Office action on the merits, but before the mailing of a final action, a notice of allowance, or an action that closes the prosecution in the application. As such, Applicant:

- Respectfully submits that the each item of information contained herein was first cited in a any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement and respectfully requests consideration of this Information Disclosure Statement under 37 CFR §1.97(c)(1) and (e)(1).
- Respectfully requests consideration of this Information Disclosure Statement under 37 CFR §1.97(c)(2) and the Commissioner is hereby-

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U.S. PTO Customer No. 25280

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authorized to withdraw the fee set forth in 37 CFR §1.17(p) from our Deposit Account 04-0500.

In the event that there are fees associated with the filing of these papers, the Commissioner is hereby authorized to withdraw such fees from our Deposit Account 04-0500

Respectfully Submitted,

John E. Vick, Jr. Reg. No. 33,808

MILLIKEN & COMPANY 920 Milliken Road, M-495 Spartanburg, SC 29303 (864) 503-1383 . .

Form PTO-1449 (Modified)				Serial No.: 10/655,227 Filing Date: September			ber 4, 2003		
INFORMATION DISCLOSURE STATEMENT IN A PATENT APPLICATION			T Inven	Inventor(s): Morin et al.					
IN A PATENT APPLICATION				Art Unit: 1774	Examiner: Edwards, Newton O.				
Sheet <u>1</u> of <u>3</u> .				O Customer No: 25280	Case No.: 5514A				
	•		U.S. P.	J.S. PATENT DOCUMENTS					
EXAMINER INITIALS	IDENTIFIER	DOCUMENT NUMBER	DATE	NAME		CLASS	SUB- CLASS		
	AA	5,231,126	7-27-93	Shi et al		524	296		
	AB	5,512,357	4-30-96	Shimura et	al.	428	283		
	AC	5,753,736	5/19/88	Bhat		524	287		
	AD	6,135,987	10/24/00	Tsai et al.		604	365		
•	AE	6,162,887	12/19/00	Yamada et	al.	526	351		
	AF	6,210,802	4-3-01	Risch et al	•	428	398		
	AG	6,218,011	4/17/01	Raetzsch et	al.	428	394		
	АН	6,231,976	5-15-01	Dean et al		428	373		
	Al	6,238,615	5-29-01	Kobayashi et al.		264	537		
	AJ .	6,261,677	7-17-01	Tsai et al.	Tsai et al.		221		
	AK	6,284,370	7-4-01	Fujimoto et	Fujimoto et al.		221		
•	AL	6,300,415	10-9-01	Okayama et	Okayama et al.		191		
	АМ	2001/0040320	11-15-01	Kobayashi et al.		264	537		
	AN	2001/0048179	12-6-01	Stewart et al.		264	211		
	AO	2002/0002241	1-3-02	Raetzsch et al.		123	556		
	AP	4,016,118	4/5/77	Hamada et al.		260	17.456		
	AQ	4,463,113	7/31/84	NaKahara et	al.	524	117		
	AR	5,049,605	9/17/91	Rekers		524	108		
	AS	5,342,868	8/30/94	Kimura et a	l.	524	108		
	АТ	5,798,167	8/25/98	Connor et a	I.	428	171		
	AU	5,811,045	9/22/98	Pike		264	168		
	AV	6,102,999	8/15/00	Cobb, III et al.		106	243		
	AW	6,127,470	10/3/00	Cobb, III et a	al.	524	367		
	AX	6,270,608	8/7/01	Vair, Jr. et a	1.	156	176		
	AY	6,207,600	3/2001	Nakajima et al.		442	311		
	AZ	5,945,211	8/99	Bersted et a	1.	428	364		
	₹ BA	6,127,440	10/3/00	Sanyasi et a	1.	521	74		
	BB	6,541,554	4/1/03	Morin et al.		524	387		

<del></del>	BC BD	4,560,734 6,203,881	12/24/85 3/20/01	Fujishita et al. Higgins	526 428	95
	BE	5,945,215	9/12/97	Bersted et al.	428	364
	BF	6,559,216	5/03	Zhao et al.	524	336
	BG	4,522,857	6/11/85	Higgins	428	95
	ВН	5,540,968	7/30/96	Higgins	428	95
	Bi	5,545,276	8/13/96	Higgins	156	79
	BJ	5,948,500	9/7/99	Higgins	428	95
	ВК	4,171,395	10/16/79	Tollotson	428	95
	BL	4,132,817	1/2/79	Tillotson	427	244
	ВМ	4,512,831	4/23/85	Tillotson	156	78
	BN	4,116,626	9/26/78	Varner	4	149
	ВО	5,136,520	8/4/92	Cox	364	470
	BP	5,208,592	5-4-93	Johnson, Jr.	341	63
	BQ	6,534,574	3/03	Zhao et al.	524	284
	BR	6,559,211	5/03	Zhao et al.	524	285
	·BS	6,656,404	12/03	Morin	264	210.
	вт	6,110,588	8/29/00	Perez et al.	428	359
	BU	6,420,024	7/16/02	Perez et al.	428	359
	BV	6,358,450	3/19/02	Sun	264	178
	BW	5,912,292	6/15/99	Sun	524	301
Examiner:				Date Considered:		

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449 (Modified) INFORMATION DISCLOSURE STATEMENT IN A PATENT APPLICATION			Serial No.:	o.: 10/655,227 Filing Date: September 4, 20					
			Inventor(s): Morin et al.						
			Group Art L	Jnit: 1774	Examiner: Edwards, Newton O.				
	Sheet 2 of 3.			istomer No: 25280	Case No.: 5514A				
	÷		OTHER D	OCUMENTS					
EXAMINER INITIALS	IDENTIFIER	INCLUDE: AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.							
	вх	Patent abstracts of Ja	4; date of publication of application polypropylene fiber; English translation						
	BY	Patent abstracts of Japan; publication number 11-181619; date of publication of application 06.07.1999; Highly heat-resistant polypropylene fiber and fiber-reinforced cement molded product using the same; English translation							
	BZ	Patent abstracts of Ja	628; date of publication 27.03.2001; Flat hed carpet; English translation						
CA Patent abstracts of Japan; publication number 2002-302825; date of publication 18.10 Highly-resistant polypropylene fibers; English translation  CB Article; Journal of applied polymer science, vol. 62, 1965-1975 (1996) John Wiley & S Spruiell et al.									
								CD	filaments; Antec '91; Lin et al.
	CE								
_	CF Article; Study on the formation of b-crystalline from isotactic polypropylene fiber; fill Intern. Polymer Processing VI, 1991; Chen et al.								
	CG	Article; Heterogeneou 1994	s Nucleation	of Polypropylene and	Polypropylene Fibers; Marcincin et al.;				
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<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Form PTO-1449 (Modified) INFORMATION DISCLOSURE STATEMENT IN A PATENT APPLICATION			Serial No	o.: 10/655,227	10/655,227 Filing Date: September 4, 2003					
			T Inventor	Inventor(s): Morin et al.						
		:	Group A	rt Unit: 1774	Examiner: I	Examiner: Edwards, Newton O.				
	Sheet 3	of <u>3</u> .	US PTO	Customer No: 25280	Case No.: 5	Case No.: 5514A				
			FOREIGN PA	ATENT DOCUMENTS						
EXAMINER INITIALS			DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION NO YES			
	СН	0 611 271	10.02.94	· EP			Х	·		
	CI	0 806 237	07.05.1997	EP			Х			
	CJ	P2002-302825	4.4.2001	Japan				Х		
	СК	02/46502	6/13/02	wo			X			
	CL	11140719	5/25/99	JP				Х		
	СМ	11061554A	3/5/99	JP			Х	·		
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Official date stamp of the United States Patent and Trademark Office nereon acknowledges receipt of:

Information Disclosure Statement: 2 pages PTO form-1449 (Modified): 4 pages **Prior Art Documents** 

RE: U. S. Patent Application Serial No.: 10/665,227
Applicant: Morin et al.

Filed:

September 4, 2003

Title: LOW-SHRINK POLYPROPYLENE TAPE FIBERS COMPRISING HIGH AMOUNTS OF NUCLEATING AGENTS

Case Number: 5514A Attorney:

JEV

Date:

April 1, 2004



Patent Division Milliken Research Corporation P. O. Box 1927 Spartanburg, S. C. 29304